

ABSTRACT

A method for producing sophorolipids having spermicidal and/or antiviral properties by synthesizing the sophorolipid by fermentation of *Candida bombicola* in a fermentation media to form a natural mixture of lactonic sophorolipids compounds and non-lactonic sophorolipids compounds and utilizing the natural mixture as a spermicidal and/or antiviral agent, and/or separating the lactonic sophorolipids from the natural mixture to form a lactonic fraction and mixing all remaining fractions to form a non-lactonic fraction and utilizing the lactonic fraction and/or the non-lactonic fraction as an spermicidal and/or antiviral agent, and sophorolipid compounds for use as spermicidal and/or antiviral agents.